



network

enterprise europe

- Final
version -

Enterprise Europe Network
Joint Booth CeBIT 2015

Hall 9 Booth C40



Business Support on Your Doorstep

- ❖ Future Match
- ❖ **Company mission**
- ❖ Exhibitors

CeBIT
future match

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HANNOVER

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Introduction



Enterprise Europe Network

Business Support on Your Doorstep

Enterprise Europe Network welcomes you to the international brokerage event “Future Match” at the CeBIT 2015. The brokerage event organized by the Enterprise Europe Network, the largest business support network in Europe enables exhibitors and visitors at the fair to find partners for collaboration, e.g. for product development, research & development, joint ventures, manufacturing, marketing and/or licensing agreements.



Speaking the language of business across Europe

The Enterprise Europe Network is unique both in terms of its wide geographic reach and of the wide range of integrated services it provides to SMEs and other business actors. This is made possible thanks to the coordinated action of more than 600 local partners, employing around 3000 experienced staff promoting competitiveness and innovation at the local level in Europe and beyond.



The Network offers support, advice and effective solutions to entrepreneurs and companies in more than 50 countries, including the 28 EU member states, four EU candidate countries (Serbia, Turkey, Iceland and the former Yugoslav Republic of Macedonia), members of the European Economic Area (EEA) and other participating third countries.

Our services are specifically designed for small and medium enterprises (SMEs) but are also available to all businesses, research centers and Universities across Europe.

Whether you need information on EU legislation, help finding a business partner, want to benefit from innovation networks in your region or need information on funding opportunities, this is the place to start.

Future Match 2015



Future Match 2015 at CeBIT

Future Match 2015 at the CeBIT in Hannover, Germany, is a brokerage event organized by the Enterprise Europe Network, the largest business support network in Europe.

Since 1999 the brokerage event Future Match has enabled exhibitors and visitors of the fair to find partners for technological cooperation, e.g. product development, research & development, joint ventures, manufacturing, marketing and/or licensing agreements.

Some facts and figures from Future Match 2014:

- more than 280 participants
- 31 countries represented
- about 1260 bilateral meetings

How can you benefit from Future Match 2015?

- Each participant can register for only Euro 110 and present services and products online at CeBIT 2015.
- For Future Match 2015 innovative collaboration offers and requests from all over Europe are presented in the Future Match online catalogue.
- Registered participants search through the catalogue and request meetings with potential customers or partners.
- Meeting requests which are confirmed by both sides are scheduled.
- Scheduled B2B meetings take place face-to-face at the Future Match stand.
- Assistance will be provided by Enterprise Europe Network staff.

Companies, universities and research institutes in the ICT sector are again invited to use this opportunity to establish new cross-border contacts for future collaboration at Future Match 2015. For registration and further information please contact the local EEN partners or:

Ms Joanna Einbock
Leibniz Universität Hannover
Brühlstr. 27
30169 Hannover
Tel.: +49 511.762 – 5406
Fax: +49 511.762 – 5723
E-Mail: joanna.einbock@zuv.uni-hannover.de

The Company Missions



Company missions to regional booths

During the international brokerage event “Future Match” at the CeBIT 2015, Leibniz Universität Hannover will organize company missions to achieve international cooperation. Therefore, guided tours to exhibitors from the area of *Lower Saxony and Bremen* will take place from the 17th to the 19th of March 2015. The tours are open and free of charge to all participants of the “Future Match” brokerage event.

Companies, universities and governmental organizations will be presenting innovative technologies, products and services from Lower Saxony and Bremen at the joint booths.

The aim of the company missions is to create technical cooperation and sustainable business opportunities between the exhibitors from Lower Saxony/Bremen and participating companies.

The company missions will be held in English and will be carried out together with the respective regional Enterprise Europe Network partners.

All participants will receive a portfolio of information about the exhibitors and their offers. Furthermore, the participants will have the possibility to exchange expressions of interest and arrange further meetings.

For more information please contact your regional Enterprise Europe Network partner or:

Annelies Bruhne
Leibniz University Hannover
EEN Lower Saxony
Tel.: +49 511.762 – 57 24
E-Mail: annelies.bruhne@zuv.uni-hannover.de



Guided Tour No 1 March 17th, 2 p.m.



TOUR I: IT Solutions for Health Applications

German Research Center for Artificial Intelligence (DFKI)

SmartMat – The intelligent sport mat as personal fitness trainer

Leibniz University Hannover

MultiScaleHuman - a European Marie Curie ITN Research Project

University Osnabrück

feelSpace - An Intuitive Tactile Navigation Device

Ostfalia University of Applied Science

Smartphone App Predicts Harmful Algal Blooms in Inland Waters

OFFIS – Institute for Information Technology

CONTACT - Social Interaction for Palliative Care Patients Living Alone

German Research Center for Artificial Intelligence (DFKI)



SmartMat – The intelligent sport mat as personal fitness trainer

More and more health conscious people are investing a lot of time in fitness programs like yoga, Pilates, or gymnastics. The SmartMat, an intelligent sport mat originated in the DFKI project Simple Skin, assumes the role of a digital trainer to help the user exercise properly. The mat looks like an ordinary exercise mat, but actually has more than 7000 embedded sensor nodes made from a very light and inexpensive fabric. The textile sensor pad can easily be rolled up and transported.

When the user is training on the mat, the system receives a fine grained, two-dimensional pressure profile from the pad. It identifies what body part is in contact with the mat, how much pressure is being applied, and displays this information on a monitor or a smartphone.

SmartMat recognizes dynamic movements like sit-ups, push-ups, oblique crunches, and notes whether the user can find the right balance between strength and technique when performing slower exercises like those of yoga, or whether the movement is smooth or abrupt. The sensor system of the mat is not only able to detect the number of repetitions of an exercise, but can also record the intensity, speed, duration, recovery time and even the respiration rate in the relaxation phase. It is so sensitive that it can determine the exact weight of a dumbbell placed on the mat.

More information: www.dfki.de/ei

Contact

Bo Zhou

Research department: Embedded Smart Systems

E-Mail: Bo.Zhou@dfki.de

Tel.: +49 631 20575 1430

MultiScaleHuman - a European Marie Curie ITN Research Project

MultiScaleHuman is a European Marie Curie Training Network which aims to visualize in 3D the functioning of the human body from a dynamic multi-scale point of view. It will lead to a better understanding of joint-related diseases in order to diagnose and treat patients more efficiently.

Musculoskeletal diseases (MSD) and related disorders are often considered as an inevitable consequence of aging. For the first time, researchers will create a predictive 3D simulating model – starting from the knee, which is one of the areas most affected by MSD – from various levels: molecular, cellular, organic, metabolic and behavioral. This is what we call multi-scale visualization. Find out more at <http://multiscalehuman.miralab.ch/>

Contact CeBIT 2015

Leibniz Universität Hannover
Mensch-Maschine-Kommunikation
Prof. Dr. rer. nat. Franz-Erich Wolter
Welfengarten 1
30167 Hannover
Tel.: +49 (0)511 762 2912
Fax: +49 (0)511 762 2913
[http:// www.gdv.uni-hannover.de](http://www.gdv.uni-hannover.de) oder
<http://www.welfenlab.de>
msh@welfenlab.de

feelSpace - An Intuitive Tactile Navigation Device

We are pleased to introduce an intuitively comprehensible navigation belt to facilitate orientation and navigation for everyone. The feelSpace belt is equipped with vibromotors and takes its wearer reliably to a pre-programmed location, communicating only by simple vibration signals. Based on ten years of scientific research, Osnabrück University developed the navigation belt to allow for easy navigation towards a predefined location without occupying eyes, hands or ears. This reduces risks in traffic and is particularly helpful while exploring unfamiliar environments, especially for those at a disadvantage in everyday navigation like the blind, the deaf and those with orientation difficulties.

Smartphone App Predicts Harmful Algal Blooms in Inland Waters

Harmful algal blooms mainly caused by cyanobacteria in freshwater ecosystems often present a health risk to the public within eutrophied shallow lakes due to algal toxins released into the water during the final stage of an algal bloom. Thus, algal growth should be carefully monitored during summer season, especially in frequented recreational areas. Traditionally, water samples must be sent to a lab to analyze the data to predict algal blooms, costing time and money. Models predicting harmful algal blooms from easily measurable parameters as smartphone app tool will help individuals to take precautionary measures in order to prevent health risks from drinking and bathing in contaminated water and raise public awareness.

Contact CeBIT 2015
Ostfalia Hochschule für Angewandte
Wissenschaften
Institut für Biotechnologie und
Umweltforschung
Dr. Hedda Sander
Tel.: +49 (0)5331 939 393 80
h.sander@ostfalia.de

CONTACT - Social Interaction for Palliative Care Patients Living Alone

Palliative care patients have a high demand on social in-teraction and communication in order to deal with their incurable terminal disease. For patients living alone, it is difficult to satisfy this demand over distance. The project CONTACT is developing an assistance system to strengthen the emotional bond between patients, friends and family members over distance. The system is meant to support the experience of and the immersion into the "other" lives by exchanging emotions and activities and thereby also encouraging explicit communication. The exchange is carried out by the design of multimodal, affective and pervasive human-technology interactions, which are unobtrusively integrated into the home and mobile environment.

Contact CeBIT 2015
OFFIS – Institut für Informatik
Dr. Wilko Heuten
Escherweg 2
D-26121 Oldenburg
Tel. +49 (0)441 9722 171
Fax: +49 (0)441 9722 111
wilko.heuten@offis.de
<http://www.contact-projekt.de>

Guided Tour No 2

March 18th, 2 p.m.



TOUR II: IT Solutions for Business management

Carl von Ossietzky University Oldenburg

Olimp: Reliable Redictions of Energy Consumption

Lowotec GmbH

Telecommuting for Everyone: Easy to Use, Flexible, Secure

Jade Hochschule

Data and Process Integration in the Hadoop Ecosystem

c4c Engineering GmbH

Tailor-Made App and Software Solutions

Hochschule Emden/Leer

Service-Oriented Cyber-physical Systems for industrial applications

Hochschule Emden/Leer

IT-Security for Mobile and Web Applications: Secure Apps and PenTaaS

Olimp: Reliable Predictions of Energy Consumption

The research project "In-Memory Planning with SAP HANA" is focusing on operational planning and optimization. It is our agenda to improve the process of business planning with predictive data analysis. This can be done by using In-Memory-Technology. This new technology is able to create much faster prediction when dealing with many data sources which is especially interesting for enterprises. In our special case of research, we deal with the estimation and calculation of energy consumption. Although this can be done by just using historical data, a more accurate result can be achieved by including further data. Concerning the scientific side of the project, it needs to be clarified how the predictions change with involvement of different combinations of data. This is done by using the SAP HANA-In-Memory-Database with SAP AFM.

Contact CeBIT 2015

Carl von Ossietzky Universität Oldenburg
Department für Informatik
Prof. Dr.-Ing. Jorge Marx Gómez
jorge.marx.gomez@uni-oldenburg.de

Telecommuting for Everyone: Easy to Use, Flexible, Secure

Today's job market is demanding more flexible employment models which means to challenge many industries. With LowoTec you can flexibly organize your telecommuting, adapted to your specific needs. Setting up a home office merely needs to plug in a network cable. The complexity is dealt with by a pair of devices fitting in any trouser pocket. The devices, one installed at the company, the other at the telecommuting workplace, establish a private direct connection via internet. Using state-of-the-art security standards all your company's network resources can be accessed. There are no limitations in applications or protocols. LowoTec is operating system independent and there is no software installation necessary.

Contact CeBIT 2015

LowoTec GmbH
Guido Neun / Henning Hoffmann
Marie-Curie-Str. 1
26129 Oldenburg
Germany
Tel. +49 (0) 411 36 116 668
Fax +49 (0) 411 36 116 669
info@LowoTec.de
<http://www.LowoTec.de>

Data and Process Integration in the Hadoop Ecosystem

In largely autonomous process control ever-increasing amounts of data is generated and made available for specific analysis functions. This is especially important in the field of sensor based process control. A key challenge is to provide solutions for effective and efficient integration of data and process management with appropriate analysis tools.

This joint project between the Institute of Business Computing (IfW) and OPITZ CONSULTING, Hamburg, demonstrates the integration of a business process engine and tools of the Hadoop ecosystem. The project aims at outlining future applications resulting from the expected symbiosis of these technologies.

Contact CeBIT 2015

Jade Hochschule
Institut für Wirtschaftsinformatik
Prof. Dipl.-Math. Alfred Wulff
Friedrich-Paffrath-Str. 101
26389 Wilhelmshaven
Tel.: +49 (0)4421 985 2425
Fax : +49 (0)4421 985 2412
wulff@jade-hs.de
<http://www.jade-hs.de/ifw>

Tailor-Made App and Software Solutions

c4c Engineering GmbH, based in Braunschweig, develops professional software solutions for large and medium-sized enterprises. The software specialist employs 75 highly qualified engineers and computer scientists specializing in technically demanding tasks. The company disposes of profound experience in software engineering, software consulting and project management.

c4c is a partner of the automotive industry and supports software projects from research and development up to the production stage, including electric mobility, driver information and navigation systems as well as driver assistance systems and automotive apps. In addition, c4c develops and designs solutions for all mobile platforms.

Contact CeBIT 2015

c4c Engineering GmbH

Jan Füllemann

Tel. +49 (0) 531 2243 55 51

jan.fuellemann@c4cengi

neering.de

Service-Oriented Cyber-physical Systems for industrial applications

We are witnessing rapid changes in the industrial environment, mainly driven by business and societal needs because of mass and extreme customization. In this context, cyber-physical systems combine progress achieved by the application of distributed computing systems on products and production systems with the power of digital data and information that is produced during manufacturing processes and also collected by devices embedded into smart products. A new generation of service-oriented cyber-physical systems builds a digitalized factory that is motor of the 4th industrial revolution. This topic constitutes a major focus of research and prototype implementations at the University of Applied Sciences Emden/Leer.

Contact CeBIT 2015
Hochschule Emden/Leer
Prof. Dr.-Ing. Armando Walter Colombo
awcolombo@et-inf.fho-
emden.de

IT-Security for Mobile and Web Applications: Secure Apps and PenTaaS

The developers' guide Secure Apps supports the programming of secure apps. The Institute of Application-Security (ifAsec GmbH), the University of Applied Science Emden/Leer, mediaTest Digital GmbH and TÜV Trust IT GmbH were assigned by the German Federal Ministry of Economic Affairs and Energy to develop this guide. Secure Apps is available free of charge as web apps as well as mobile apps. The mobile apps were developed by students of the University of Applied Science Emden/Leer within the scope of their practice phases at ifAsec.

Web pages provide serious leaks for cyberattacks. At more than 90 % of the checked web pages ifAsec identified significant weak points. Web pages can be checked automatically and at reasonable price by PenTaaS (Pen-Testing as a Service)

Contact CeBIT 2015
Hochschule Emden/Leer
Fachbereich Technik
Prof. (Verw.) Dipl.-Ing. Udo H. Kalinna
udo.kalinna@hs-emden-leer.de

Guided Tour No 3

March 19th, 2 p.m.



TOUR III: IT solutions for profession and education

German Research Center for Artificial Intelligence (DFKI)

ASSAM – Intelligent Mobility Support

Leuphana University Lüneburg

Did Your Teacher Ask for Your Opinion?

University of Applied Science and Arts Hildesheim

Start-Up Project „Urban-Invention“

Jade Hochschule

Virtual Artificial Head

German Research Center for Artificial Intelligence (DFKI)



ASSAM – Intelligent Mobility Support

Mobility platforms such as walkers and wheelchairs assist the elderly to remain mobile despite the everyday presence of equilibrium problems or an unsteady gait. If additional constraints become relevant, for example, vision or hearing impairments or loss of orientation, the usual platforms alone are no longer adequate to ensure safe movement. The research project ASSAM (Assistants for Safe Mobility) develops mobility assistant systems that aid the elderly to compensate for cognitive handicaps and declining capabilities. This research is being conducted by a European consortium consisting of social organizations, suppliers, and research institutes with a focus on modular components for commercially available walkers, wheelchairs, or the innovative new Tricycles. To keep costs manageable, the mobility assistants can be selectively expanded by components that meet the current needs of the user.

Included among the variety of individual components, for example, is the ASSAM Navigation Aid, which attaches to the walker in the form of a tablet-PC. Used in combination with the ASSAM OdoWheel, which easily attaches to the walker in place of the normal rear wheels, the Navigation Aid determines speed and direction and guides the user safely to the chosen destination. Route planning is designed to avoid cobblestone pavements or gravel surfaces as much as possible. There is also an emergency button which can be activated at any time to contact a Red Cross worker.

For individuals with declining vision or hearing impairments, the walker can also be equipped with two electronic hand grips, the iHandleBars. By means of vibration or light signals, if preferred, the respective grip will inform the user of the direction to be taken in order to arrive at the goal. Support can also be obtained on sloping terrains simply by replacing the walker wheels with electric iWheels. These make it easier to walk uphill and brake automatically as the walker makes its way down a slope.

Equipped with laser scanners, the mobility assistant automatically bypasses obstacles or stops, for example, at a curb or stairway. Wheelchairs, especially in mapped interior environments, can be autonomously controlled directly by voice commands.

The collaborative project ASSAM is funded under the EU AAL JP (Ambient Assisted Living Joint Programme) and the German Ministry of Education and Research (BMBF), the Spanish Ministerio de Industria, Turismo y Comercio, and the Dutch Ministry of Health, Welfare and Sport (VWS) for a period of three years. The project launch was on June 1, 2012, bringing together collaborative partners from Germany, Spain, and The Netherlands: DFKI (D), Budelmann Elektronik (D), Die Johanniter (D), neusta mobile solutions (D), Universitat Politècnica de Catalunya – BarcelonaTech (ES), Centre de Vida Independent (ES), Utrecht School of the Arts (NL), Stichting Bartiméus (NL), and Ecobike (ES).

More information:
www.assam-project.eu

Contact
Prof. Dr. Bernd Krieg-Brückner
Bremen Ambient Assisted Living Lab
Research department: Cyber-Physical Systems
E-Mail: Bernd.Krieg-Brueckner@dfki.de
Tel.: +49 421 218 64220

Did Your Teacher Ask for Your Opinion?

What would you have told your teacher? Were lessons exciting or boring? Did everyone in the class understand? Were the assessments fair? Were you happy with the classroom climate and the results? Edkimo opens up a channel for communication between teachers and students via a feedback app. With Edkimo teachers get clear, honest and anonymous feedback from their students in real time. We believe that learners are the real experts for their own learning. With a playful approach, Edkimo makes feedback for learning fun.

Edkimo is a spin-off project of the Gamification Lab supported by the Leuphana Business Accelerator within the Innovation Incubator at Leuphana University Lüneburg. We are interested in your opinion!

Contact CeBIT 2015

Leuphana University of Lüneburg
Centre for Digital Cultures
Sebastian Waack
Tel.: +4131.677 2329
sebastian@edkimo.com

Start-Up Project „Urban-Invention“

Through extraordinary experiences two designers want to transform public space into a place of wonder. Thus, Amelie Künzler and Sandro Engel found the company Urban Invention.

The first product: A pedestrian traffic light push-button equipped with a touchscreen and a computing unit enables communication between two buttons. This allows people to interact with someone from the other side of the street. The team worked with partners from industry on a prototype and installed it in November 2014.

Further applications of the button are to follow. Thus, the company wants to turn everyday life upside down through creativity and gaming.

Contact CeBIT 2015

HAWK Hildesheim
Fakultät Gestaltung
Urban Invention (Gründungsprojekt)
Prof. Stephan Woelwer
Renatastr. 11
31134 Hildesheim
Tel.: 49 (0)5121 703 71 22
Fax: +49 (0) 5121 881-341
contact@urban-invention.de
www.urban-invention.com
<http://www.hawk-hhg.de>

Virtual Artificial Head

Auditory perception is strongly influenced by spatial attributes of the sound field surrounding the listener. If spatial attributes are to be preserved in recordings, the effect of the individual anatomy of the listener's head, torso and outer ears must be taken into account.

We try to accomplish this by using a microphone array to capture the sound field and by an individualized reproduction via headphones, in which the recorded channels are filtered and mixed to the two headphone signals. Thus, for any individual listener the reproduced signals at the ear drums match those of the original situation, thereby creating the illusion of being immersed in the original sound field.

Contact CeBIT 2015

Jade Hochschule
Insitut für Hörtechnik und Audiologie
Prof. Dr. Matthias Blau
Ofener Str. 16/19
26121 Oldenburg
Tel.: +49 (0)441 770 83 726
Fax: +49 (0)441 770 83 777
matthias.blau@jade-hs.de
<http://www.hoertechnik-audiologie.de>

